BUILDING STANDARDS COMMISSION

2525 Natomas Park Drive, Suite 130 Sacramento, California 95833-2936 (916) 263-0916 FAX (916) 263-0959



November 14, 2012

Sarah Allen, Planning Technician City of Lafayette 3675 Mount Diablo Boulevard, Suite 210 Lafayette, CA 94549

Dear Ms. Allen:

This letter is to acknowledge receipt on June 29, 2012 of the City of Lafayette submittal pertaining to Ordinance No. 600 with findings and is acceptable for filing (effective October 17, 2012). Your filing attests to your understanding that according to Health and Safety Code §17958.7 no modification or change to the California Building Standards Code shall become effective or operative for any purpose until the findings and the modifications or changes have been filed with the California Building Standards Commission (the Commission).

This letter attests only to the filing of these local modifications with the Commission, which is not authorized by law to determine the merit of the filing. As a reminder, local modifications are specific to a particular edition of the Code. They must be readopted and filed with the Commission in order to remain in effect when the next triennial edition of the Code is published.

In addition, should you receive Fire Protection District ordinances for ratification, it is required to submit the ratified ordinances to the Department of Housing and Community Development [Health and Safety Code Section 13869.7(c)], ATTENTION: State Housing Law Program Manager, rather than the Commission. Likewise, ordinances containing energy efficiency standards may require approval from the California Energy Commission pursuant to Public Resources Code Section 25402.1(h)(2).

If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,

Enrique M. Rodriguez

Associate Construction Analyst

CC:

Chron

Local Filings



City Council

Carol Federighi, Mayor Mike Anderson, Vice Mayor Brandt Andersson, Council Member Carl Anduri, Council Member Don Tatzin, Council Member

June 28, 2012

California Building Standards Commission 2525 Natomas Park Drive, Suite 130 Sacramento, CA 95833-2936

RE: Adoption of more restrictive building standards by the City of Lafayette

To Whom It May Concern:

Pursuant to Health and Safety Code section 17958.7, the City Council of the City of Lafayette has adopted Ordinance No. 600 amending the California Building Standards Code and establishing more restrictive building standards deemed reasonably necessary because of local climatic, geological, and topographic conditions. Enclosed with this letter are Ordinance No. 600 and Resolution 2012-19 making findings in support of changes, additions, and deletions to the statewide building standards code.

Sincerely,

Sarah Allen

Planning Technician

www.ci.lafayette.ca.us

CERTIFIED AS A TRUE COPY

CYENK OF CITY OF LAFAYETTE, CAUFORD

BEFORE THE CITY COUNCIL OF THE CITY OF LAFAYETTE

In the Matter of:

Ordinance adopting the (1) 2010 California)	
Building Code; (2) 2010 California)	
Residential Code; (3) 2010 California Green)	Ordinance No. 600
Building Standards Code; (4) 2010 California)	
Electrical Code; (5) 2010 California Plumbing)	
Code; and (6) 2010 California Mechanical Code,)	
with changes, additions and deletions)	

WHEREAS, the California Building Standards Commission ("Commission") has adopted and published the 2010 California Building Standards Code ("CBSC"), which became effective January 1, 2011;

WHEREAS, the CBSC is set forth in Title 24 of the California Code of Regulations ("CCR"), and includes the: California Building Standards Administrative Code; California Building Code; California Residential Code; California Electrical Code; California Mechanical Code; California Plumbing Code; California Energy Code; State Historical Building Code; California Fire Code; California Existing Building Code; California Green Building Standards Code; and the California Reference Standards Code;

WHEREAS, California Health and Safety Code Sections 17958, 17960, 18938(b) and 18948 require all California cities and counties to enforce the CBSC through a local building department and or fire district, as it applies to all buildings constructed, repaired, altered, and added to, that are not subject to state agency enforcement such as public schools and hospital buildings;

WHEREAS, California Health and Safety Code Sections 17958 *et seq*. and 18941.5(b) authorize cities to adopt the CBSC with modifications that make the standards set forth therein more restrictive, so long as such modifications are determined to be reasonably necessary because of local climatic, geological, or topographical conditions;

WHEREAS, the City of Lafayette desires to adopt the 2010 California Building Code; 2010 California Residential Code; 2010 California Green Building Standards Code; 2010 California Electrical Code; 2010 California Plumbing Code; and 2010 California Mechanical Code, and certain provisions of the Contra Costa County Ordinance Code, with certain amendments to the CBSC codes to ensure those codes are tailored to the particular safety needs of the City as required by its unique climatic, geological and topographical conditions;

WHEREAS, the City is authorized by California Government Code Section 50022.1 *et seq*. to adopt those codes contained in the CBSC and the provisions of the Contra Costa County Ordinance Code, by reference;

WHEREAS, the City Council held a public hearing on June 11, 2012 at which time all interested persons had the opportunity to appear and be heard on the matter of adopting the 2010 California Building Code; 2010 California Residential Code; 2010 California Green Building Standards Code; 2010 California Electrical Code; 2010 California Plumbing Code; and 2010 California Mechanical Code, as amended herein;

WHEREAS, the City published notice of the aforementioned public hearing pursuant to California Government Code Section 6066 on May 25, 2012 and June 1, 2012; and

WHEREAS, all other legal and procedural prerequisites relating to the adoption of this Ordinance have occurred.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LAFAYETTE DOES HEREBY ORDAIN AS FOLLOWS:

<u>Section 1</u>. <u>Findings</u>. To the extent that the following changes and modifications to the CBSC are deemed more restrictive than the standards contained therein, thus requiring that findings be made pertaining to local conditions justifying such modifications, the City Council adopted Resolution No. 2012-19 that found and determined that the following changes and modifications are reasonably necessary due to the City's local climatic, geological, or topographical conditions.

<u>Section 2</u>. <u>Amendments</u>. Section 3-304 of the Lafayette Municipal Code, entitled "County Ordinance Code Division 74—Building code," is hereby re-titled "City of Lafayette Building Code."

<u>Section 3</u>. <u>Amendments</u>. Section 3-304 of the Lafayette Municipal Code, entitled "City of Lafayette Building Code," is hereby amended to read as follows:

"3-304 - City of Lafayette Building Code.

Chapter 74-2 ADOPTION

74-2.002 Adoption.

- (a) The building code of this city is the 2010 California Building Code (California Code of Regulations, Title 24, Part 2, Volumes 1 and 2), the 2010 California Residential Code (California Code of Regulations, Title 24, Part 2.5), and the 2010 California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), as amended by the changes, additions, and deletions set forth in this chapter and Title 7, Division 72 of the Contra Costa County Ordinance Code.
- (b) The 2010 California Building Code, with the changes, additions, and deletions set forth in this chapter and Title 7, Division 72 of the Contra Costa County Ordinance Code, is hereby adopted by this reference as though fully set forth in this ordinance.
- (c) The 2010 California Residential Code, with the changes, additions, and deletions set forth in this chapter and Title 7, Division 72 of the Contra Costa County Ordinance Code, is hereby adopted by this reference as though fully set forth in this ordinance.
- (d) The 2010 California Green Building Standards Code, with the changes, additions, and deletions set forth in this chapter and Title 7, Division 72 of the Contra Costa County Ordinance Code, is hereby adopted by this reference as though fully set forth in this ordinance.
- (e) At least one copy of this building code is now on file in the office of the city clerk for public inspection, and the other requirements of Government Code section 50022.6 have been and shall be complied with.

(f) As of the effective date of this ordinance, the provisions of the building code are controlling and enforceable within the city.

Chapter 74-4 MODIFICATIONS

- **74-4.002** Amendments to CBC. The 2010 California Building Code ("CBC") is hereby amended by the changes, additions, and deletions set forth in this chapter and Title 7, Division 72 of the Contra Costa County Ordinance Code. Section numbers used below are those of the 2010 California Building Code.
- (a) CBC Chapter 1, entitled Scope and Administration, is hereby amended by the provisions of Title 7, Division 72 of the Contra Costa County Ordinance Code, and as follows:
 - (1) Sections 103, 109, 112, 113, 114, and 116 of CBC Chapter 1 are deleted in their entirety.
 - (2) Section 105.2, entitled "Work exempt from permit," is amended to read as follows:
 - "105.2 Work exempt from permit. Exemptions from *permit* requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. *Permits* shall not be required for the following:

Building:

- 1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet (11 m2).
- 2. Fences not over 6 feet (1829 mm) high.
- 3. Oil derricks.
- 4. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
- 5. Retaining walls that are not more than three feet in height, measured from the top of the footing to the top of the wall, unless supporting a surcharge or ground slope exceeding 1:2 or impounding class I, II, or III-a liquids.
- 6. Water tanks supported directly on grade if the capacity does not exceed 5,000 gallons (18 925 L) and the ratio of height to diameter or width does not exceed 2:1.
- 7. Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade, and not over any basement or *story* below and are not part of an *accessible route*.
- 8. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
- 9. Temporary motion picture, television and theater stage sets and scenery.
- 10. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 24 inches (610 mm) deep, do not exceed 5,000 gallons (18 925 L) and are installed entirely above ground.
- 11. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
- 12. Swings and other playground equipment accessory to detached one- and two-family dwellings.

- 13. Window *awnings* supported by an *exterior wall* that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support of Groups R-3 and U occupancies.
- 14. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.

Electrical:

Repairs and maintenance: Minor repair work, including the replacement of lamps or the connection of *approved* portable electrical equipment to *approved* permanently installed receptacles.

Radio and television transmitting stations: The provisions of this code shall not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for a power supply and the installations of towers and antennas. **Temporary testing systems:** A *permit* shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

Gas:

- 1. Portable heating appliance.
- 2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

Mechanical:

- 1. Portable heating appliance.
- 2. Portable ventilation equipment.
- 3. Portable cooling unit.
- 4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
- 5. Replacement of any part that does not alter its approval or make it unsafe.
- 6. Portable evaporative cooler.
- 7. Self-contained refrigeration system containing 10 pounds (5 kg) or less of refrigerant and actuated by motors of 1 horsepower (746 W) or less.

Plumbing:

- 1. The stopping of leaks in drains, water, soil, waste or vent pipe, provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with the new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.
- 2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures."
- (3) Section 107.1, entitled "General," of Section 107 entitled, "Submittal documents," is amended to read as follows:
 - **"107.1 General.** Submittal documents consisting of *construction documents*, statement of *special inspections*, geotechnical report and other data shall be submitted in two or

more sets with each *permit* application. The *construction documents* shall be prepared by a *registered design professional* where required by applicable federal, state or local laws, rules or regulations. Where special conditions exist, the *building official* is authorized to require additional *construction documents* to be prepared by a *registered design professional*."

- (4) Section 107.2.1, entitled "Information on construction documents," is amended to read as follows:
 - "107.2.1. Information on construction documents. Plans and specifications shall be drawn to scale on substantial paper or cloth and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and to show in detail that it will conform to this code and all other applicable federal, state and local laws, rules and regulations. The first sheet of each set of plans shall give the house and street address of the work and the name and address of the owner and of the person who prepared the plans. Plans shall include a plot plan showing the location of the lot corners as established on the ground, the elevation of the top and toe of cuts and fills, and the location of the proposed building and of every existing building on the property. Instead of detailed specifications, the county building official may approve references on the plans to a specific section or part of this code or other ordinances or laws."
- (5) Section 110.1, entitled "General," of Section 110, entitled "Inspections," is amended to read as follows:

"110.1 General. Construction or work for which a *permit* is required shall be subject to inspection by the *building official* and such construction or work shall remain accessible and exposed for inspection purposes until *approved*. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of any other applicable federal, state or local laws, rules or regulations. Inspections presuming to give authority to violate or cancel the provisions of this code or of other applicable federal, state or local laws, rules or regulation shall not be valid. It shall be the duty of the *permit* applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the *building official* nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

At the time of first inspection by the county building official, property corners (including angle points) shall be identified with monuments in accordance with the legal description furnished with the application to build, sufficient to locate the proposed structure in relation to the lot lines, except that this requirement shall not apply to minor alterations or repairs to existing structures not affecting the exterior limits thereof, and construction of accessory buildings or structures of a building permit value of less than \$500.Monuments shall be driven flush with the ground and tagged as required by the Land Surveyor Act (Business and Professions Code section 8772). The plot plan required by Section 107.2.1 shall indicate the locations and identification of all property comer monuments. Property corner monuments shall consist of one of the following:

(A) Redwood hub not less than two inches square and twelve inches long;

- (B) Galvanized iron pipe not less than one inch in diameter and thirty inches long filled with concrete; or
- (C) Other material of sufficient durability, placed as not to be readily disturbed, acceptable to the county building official."
- (b) Section 907.2.11.5.1, entitled "Flat roof buildings," is hereby added to Section 907.2.11.5, entitled "Existing Group R-3 Occupancies," of CBC Chapter 9, entitled "Fire Protection Systems," to read as follows:
 - "907.2.11.5.1 Flat roof buildings. In existing flat roof buildings, the installation of a smoke detector that complies with Section 907.2.10 shall be required when a pitch roof is added on top of the existing flat roof and the solid sheathing of the flat roof is not removed."
- (c) Section 1406.5, entitled "Wood shakes or shingles," is hereby added to Section 1406, entitled "Combustible Materials on the Exterior Side of Exterior Walls," of CBC Chapter 14, entitled "Exterior Walls," to read as follows:
 - "1406.5 Wood shakes or shingles. Wood shakes or shingles used for exterior wall covering shall be fire treated unless there is a minimum of 10 feet from the exterior wall (including shakes or shingles) to the property line of all sides, except for any sides of exterior walls facing the street."
- (d) Equation 12.8-5 contained in Section 1615A.1.7 ASCE 7, Section 12.8.1.1 of CBC Chapter 1614A, entitled "Structural Design," is hereby amended to read as follows:

"
$$C_s = 0.044 S_{DS}I \ge 0.01$$
 (12.8-5)

where S_{DS} is the 5 percent damped design spectral response acceleration parameter at short periods as defined in Section 11.4.4 and 1 is the importance factor in Section 11.5.1."

- (e) Section 1809.8, entitled "Plain concrete footings," of CBC Chapter 18, entitled "soils and foundations," is hereby deleted in its entirety.
- (f) Section 1810.3.9.3, entitled "Placement of reinforcement," of CBC Chapter 18, entitled "Soils and Foundations," is hereby amended to read as follows:
 - "1810.3.9.3 Placement of reinforcement. Reinforcement where required shall be assembled and tied together and shall be placed in the deep foundation element as a unit before the reinforced portion of the element is filled with concrete.

Exceptions:

- 1. Steel dowels embedded 5 feet (1524 mm) or less shall be permitted to be placed after concreting, while the concrete is still in a semifluid state.
- 2. For deep foundation elements installed with a hollow-stem auger, tied reinforcement shall be placed after elements are concreted, while the concrete is still in a semifluid state. Longitudinal reinforcement without lateral ties shall be placed either through the hollow stem of the auger prior to concreting or after concreting, while the concrete is still in a semifluid state."

(g) Section 1908.1, entitled "General," of Section 1908, entitled "Modifications to ACI 318," of CBC Chapter 19, entitled "Concrete," is hereby amended to read as follows:

"1908.1 General. The text of ACI 318 shall be modified as indicated in Sections 1908.1.1 through 1908.1.11."

- (h) Section 1909, entitled "Structural Plain Concrete," of CBC Chapter 19, entitled "Concrete," is hereby deleted in its entirety.
- (i) Section 1910.1, entitled "General" of Section 1910, entitled "Minimum Slab Provisions," of CBC Chapter 19, entitled "Concrete," is hereby amended to read as follows:

"1910.1 General. The thickness of concrete floor slabs supported directly on the ground shall not be less than $3^1/2$ inches (89 mm). A 6-mil (0.006 inch; 0.15 mm) polyethylene vapor retarder with joints lapped not less than 6 inches (152 mm) shall be placed between the base course or subgrade and the concrete floor slab, or other *approved* equivalent methods or materials shall be used to retard vapor transmission through the floor slab. Slabs shall have six inches by six inches by ten gauge wire mesh or equal at mid-height.

Exception: A vapor retarder is not required:

- 1. For detached structures accessory to occupancies in Group R-3, such as garages, utility buildings or other unheated facilities.
- 2. For unheated storage rooms having an area of less than 70 square feet (6.5 m^2) and carports attached to occupancies in Group R-3.
- 3. For buildings of other occupancies where migration of moisture through the slab from below will not be detrimental to the intended occupancy of the building.
- 4. For driveways, walks, patios and other flatwork which will not be enclosed at a later date.
- 5. Where approved based on local site conditions."
- (j) Appendix A, Appendix B, Appendix D, Appendix E, Appendix G, Appendix H, Appendix J, and Appendix K of the CBC are hereby deleted in their entirety.
- **74-4.004** Amendments to CRC. The 2010 California Residential Code ("CRC") is amended by the changes, additions, and deletions set forth in this chapter and Title 7, Division 72 of the Contra Costa County Ordinance Code. Section numbers used below are those of the 2010 California Residential Code.
- (a) Sections R103 entitled "Department of Building Safety", R108 entitled "Fees", R111 entitled "Service Utilities", R112 entitled "Board of Appeals", R113 entitled "Violations", and R114 entitled "Stop Work Order" of CRC Chapter 1, entitled "Scope and Application," are hereby deleted in their entirety.
- (b) Section R105.2, entitled "Work exempt from permit," of CRC Chapter 1, entitled "Scope and Application," is hereby amended to read as follows:
 - **"R105.2 Work exempt from permit.** *Permits* shall not be required for the items listed in this section below. Exemption from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other applicable federal, state or local laws, rules or regulations.

Building:

- 1. One-story detached *accessory structures* used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet (11.15 m²).
- 2. Fences not over 6 feet (1829 mm) high.
- 3. Retaining walls that are not more than three feet in height, measured from the top of the footing to the top of the wall, unless supporting a surcharge or ground slope exceeding 1:2 or impounding class I, II, or III-a liquids.
- 4. Water tanks supported directly upon *grade* if the capacity does not exceed 5,000 gallons (18 927 L) and the ratio of height to diameter or width does not exceed 2 to 1.
- 5. Sidewalks and driveways.
- 6. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
- 7. Prefabricated swimming pools that are less than 24 inches (610 mm) deep.
- 8. Swings and other playground equipment.
- 9. Window awnings supported by an exterior wall which do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support.
- 10. Decks not exceeding 200 square feet (18.58 m^2) in area, that are not more than 30 inches (762 mm) above *grade* at any point, are not attached to a *dwelling* and do not serve the exit door required by Section R311.4.

Electrical:

- 1. Listed cord-and-plug connected temporary decorative lighting.
- 2. Reinstallation of attachment plug receptacles but not the outlets therefor.
- 3. Replacement of branch circuit overcurrent devices of the required capacity in the same location.
- 4. Electrical wiring, devices, *appliances*, apparatus or *equipment* operating at less than 25 volts and not capable of supplying more than 50 watts of energy.
- 5. Minor repair work, including the replacement of lamps or the connection of *approved* portable electrical *equipment* to *approved* permanently installed receptacles.

Gas:

- 1. Portable heating, cooking or clothes drying appliances.
- 2. Replacement of any minor part that does not alter approval of *equipment* or make such *equipment* unsafe.
- 3. Portable-fuel-cell *appliances* that are not connected to a fixed piping system and are not interconnected to a power grid.

Mechanical:

- 1. Portable heating appliances.
- 2. Portable ventilation appliances.
- 3. Portable cooling units.
- 4. Steam, hot- or chilled-water piping within any heating or cooling *equipment* regulated by this code.
- 5. Replacement of any minor part that does not alter approval of *equipment* or make such *equipment* unsafe.
- 6. Portable evaporative coolers.
- 7. Self-contained refrigeration systems containing 10 pounds (4.54 kg) or less of refrigerant or that are actuated by motors of 1 horsepower (746 W) or less.
- 8. Portable-fuel-cell *appliances* that are not connected to a fixed piping system and are not interconnected to a power grid.

The stopping of leaks in drains, water, soil, waste or vent pipe; provided, however, that if any concealed trap, drainpipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a *permit* shall be obtained and inspection made as provided in this code.

The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures."

(c) Section R403.1.3, entitled "Seismic reinforcing," of CRC Chapter 4, entitled "Foundations," is hereby amended to read as follows:

"R403.1.3 Seismic reinforcing. Concrete footings located in Seismic Design Categories D_0 , D_1 and D_2 , as established in Table R301.2 (1), shall have minimum reinforcement. Bottom reinforcement shall be located a minimum of 3 inches (76 mm) clear from the bottom of the footing.

In Seismic Design Categories D_0 , D_1 and D_2 where a construction joint is created between a concrete footing and a stem wall, a minimum of one No. 4 bar shall be installed at not more than 4 feet (1219 mm) on center. The vertical bar shall extend to 3 inches (76 mm) clear of the bottom of the footing, have a standard hook and extend a minimum of 14 inches (357 mm) into the stem wall.

In Seismic Design Categories D_0 , D_1 and D_2 where a grouted masonry stem wall is supported on a concrete footing and stem wall, a minimum of one No. 4 bar shall be installed at not more than 4 feet (1219 mm) on center. The vertical bar shall extend to 3 inches (76 mm) clear of the bottom of the footing and have a standard hook.

In Seismic Design Categories D_0 , D_1 and D_2 masonry stem walls without solid grout and vertical reinforcing are not permitted."

- (d) Section R404.1.4.1, entitled "Masonry foundation walls," of CRC Chapter 4, entitled "Foundations," is hereby amended to read as follows:
 - "R404.1.4.1 Masonry foundation walls. In addition to the requirements of Table R404.1.1 (1), plain masonry walls in buildings assigned to Seismic Design Category D_0 , D_1 or D_2 shall comply with the seismic requirements of Section 1.17.4.4 of TMS 402, ACI 530, or ASCE 5."
- (e) Section R404.1.4.2, entitled "Concrete foundation walls," of CRC Chapter 4, entitled "Foundations," is hereby amended to read as follows:
 - "R404.1.4.2 Concrete foundation walls. Concrete foundation walls in buildings assigned to Seismic Design Category D_0 , D_1 or D_2 shall comply with ACI318, ACI 332, or PCA 100."

<u>Section 4</u>. <u>Amendments</u>. Section 3-305 of the Lafayette Municipal Code, entitled, "County Ordinance Code Division 76—Electrical code," is hereby re-titled "City of Lafayette Electrical Code."

<u>Section 5</u>. <u>Amendments</u>. Chapter 76-2, entitled "Adoption," of Section 3-305 of the Lafayette Municipal Code, entitled "City of Lafayette Electrical Code," is hereby amended to read as follows:

"Chapter 76-2 ADOPTION

76-2.002 Adoption.

- (a) The electrical code of this city is the 2010 California Electrical Code (California Code of Regulations, Title 24, Part 3), as amended by the changes, additions, and deletions set forth in Title 7, Division 76 of the Contra Costa County Building Regulations.
- (b) The 2010 California Electrical Code, with the changes, additions, and deletions set forth in Title 7, Division 76 of the Contra Costa County Building Regulations, is hereby adopted by this reference as though fully set forth in this ordinance.
- (c) At least one copy of this electrical code is now on file with the office of the city clerk for public inspection, and the other requirements of Government Code section 50022.6 have been and shall be complied with.
- (d) As of the effective date of this ordinance, the provisions of the electrical code are controlling and enforceable within the city."

<u>Section 6</u>. <u>Amendments</u>. Article 76-4.2 of Chapter 76-4, entitled "Modifications" of Section 3-305 of the Lafayette Municipal Code, entitled "City of Lafayette Electrical Code," is hereby re-titled "Deleted," deleted in its entirety, and amended to read as follows:

"Article 76-4.2 Deleted"

<u>Section 7</u>. <u>Amendments</u>. Section 3-306 of the Lafayette Municipal Code, entitled, "County Ordinance Code Division 78—Plumbing Code," is hereby re-titled "City of Lafayette Plumbing Code."

<u>Section 8</u>. <u>Amendments</u>. Chapter 78-2, entitled "Adoption," of Section 3-306 of the Lafayette Municipal Code, entitled "City of Lafayette Plumbing Code," is hereby amended to read as follows:

"Chapter 78-2 ADOPTION

78-2.002 Adoption.

- (a) The plumbing code of this city is the 2010 California Plumbing Code (California Code of Regulations, Title 24, Part 5), as amended by the changes, additions, and deletions set forth in this chapter and Title 7, Division 72 of the Contra Costa County Code.
- (b) The 2010 California Plumbing Code, with the changes, additions, and deletions set forth in this chapter and Title 7, Division 72 of the Contra Costa County Ordinance Code, is adopted by this reference as though fully set forth in this ordinance.

- (c) At least one copy of this plumbing code is now on file in the office of the city clerk for public inspection, and the other requirements of Government Code section 50022.6 have been and shall be complied with.
- (d) As of the effective date of this ordinance, the provisions of the plumbing code are controlling and enforceable within the city."

<u>Section 9</u>. <u>Amendments.</u> Section 3-307 of the Lafayette Municipal Code, entitled "County Ordinance Code Division 710 – Mechanical Code," is hereby re-titled "City of Lafayette Mechanical Code."

<u>Section 10</u>. <u>Amendments</u>. Chapter 710-2, entitled "Adoption," of Section 3-307 of the Lafayette Municipal Code, entitled "City of Lafayette Mechanical Code," is hereby amended to read as follows:

"Chapter 710-2 ADOPTION

710-2.002 Adoption.

- (a) The mechanical code of this city is the 2010 California Mechanical Code (California Code of Regulations, Title 24, Part 4), as amended by the changes, additions, and deletions set forth in this ordinance and Title 7, Division 72 of the Contra Costa County Code.
- (b) The 2010 California Mechanical Code, with the changes, additions, and deletions set forth in this chapter and Title 7, Division 72 of the Contra Costa County Code, is adopted by this reference as though fully set forth in this ordinance.
- (c) At least one copy of this mechanical code is now on file in the office of the city clerk for public inspection, and the other requirements of Government Code section 50022.6 have been and shall be complied with.
- (d) As of the effective date of this ordinance, the provisions of the mechanical code are controlling and enforceable within the city."

<u>Section 11.</u> <u>Amendments</u>. Section 3-309 of the Lafayette Municipal Code, entitled, "Repeals" is hereby amended to read as follows:

"3-309 Repeals.

Ordinance No. 570 and all ordinances adopting a previous edition of the Uniform Codes or California Codes that are adopted by this chapter are superseded and repealed."

<u>Section 12</u>. <u>CEQA</u>. The City Council finds that adoption of this Ordinance is not a "project," as defined in the California Environmental Quality Act because it does not have a potential for resulting in either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment and concerns general policy and procedure making.

<u>Section 13</u>. <u>Severability</u>. If any section, subsection, subdivision, paragraph, sentence, clause or phrase of this Ordinance, or any part thereof is for any reason held to be unconstitutional, invalid or ineffective by any court of competent jurisdiction, such decision shall not affect the validity or effectiveness of the

remaining portions of this Ordinance or any part thereof. The City Council hereby declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause or phrase of this Ordinance irrespective of the fact that one or more sections, subsections, subdivision, paragraphs, sentences, clauses or phrases be declared unconstitutional, invalid or ineffective. To this end the provisions of this Ordinance are declared to be severable.

<u>Section 14</u>. <u>Publication</u>. The City Clerk shall either (a) have this ordinance published in a newspaper of general circulation once within fifteen (15) days after its adoption, or (b) have a summary of this ordinance published twice in a newspaper of general circulation, once five (5) days before its adoption and again within fifteen (15) days after adoption.

<u>Section 15</u>. <u>Filing with California Building Standards Commission</u>. The City Clerk shall file a certified copy of this Ordinance with the California Building Standards Commission within 10 days of its adoption.

Section 16. Effective Date. This ordinance shall become effective thirty (30) days after its adoption.

The foregoing ordinance was introduced at a regular meeting of the City Council of the City of Lafayette on June 11, 2012 and was adopted at a regular meeting of the City Council on June 25, 2012, by the following vote:

AYES: Federighi, M. Anderson, B. Andersson, Anduri and Tatzin

NOES: None ABSENT: None ABSTAIN: None

APPROVED:

Carol Federighi, Mayor

ATTEST:

canne Robbins City Clerk

BEFORE THE CITY COUNCIL OF THE CITY OF LAFAYETTE IN THE MATTER OF:

Resolution Making Findings to Support the)	
Changes, Additions and Deletions Made by the)	Resolution 2012-19
City of Lafayette to the 2010 California Building)	
Standards Code, because of Local Climatic,)	
Geological and Topographical Conditions)	

WHEREAS, the California Building Standards Commission has adopted and published the 2010 Building Standards Code, which is comprised of the 2010 California Building, Residential, Green Building Standards, Electrical, Plumbing, and Mechanical codes (collectively, "CBSC"). CBSC are enforced in Contra Costa County by the Building Inspection Division of the Department of Conservation and Development.

WHEREAS, these CBSC apply statewide, however Health and Safety Code sections 17958.5 and 18941.5 authorize a local jurisdiction to modify or change these codes and establish more restrictive building standards if the jurisdiction finds that the modifications and changes are reasonably necessary because of local climatic, geological or topographical conditions.

WHEREAS, on June 25, 2012, the Lafayette City Council adopted Ordinance No. 600, adopting the CBSC, with certain changes, additions and deletions, as specified in Ordinance No. 600, made to address local climatic, geological and topographical conditions.

WHEREAS, pursuant to Health and Safety Code section 17958.7, any changes, additions and deletions made to the CBSC by Ordinance No. 600 that establish more restrictive building standards than those contained in the CBSC were necessary as a result of local climatic, geological, and topographic conditions, as described in more detail below.

WHEREAS, the City's amendments to the CBSC that address seismicity are necessary as a result of the following local geological and topographic conditions:

Lafayette lies within Contra Costa County, which is located in Seismic Risk Zone 4, which is the worst earthquake area in the United States. Buildings and other structures in Zone 4 can experience major seismic damage. Contra Costa County is in close proximity to numerous earthquake faults including the San Andreas Fault and contains all or portions of the Hayward, Calaveras, Concord, Antioch, Mt. Diablo, and other lesser faults. A 4.1 earthquake with its epicenter in Concord occurred in 1958, and a 5.4 earthquake with its epicenter also in Concord occurred in 1955. The Concord and Antioch faults have a potential for a Richter 6 earthquake and the Hayward and Calaveras faults have the potential for a Richter 7 earthquake. Minor tremblers from seismic activity are not uncommon in the area.

A study released in 1990 by the United States Geological Survey states that there is a 67% chance of another earthquake the size of Loma Prieta during the next 30 years, and that the quake could strike at any time, including today. Scientists, therefore, believe that an earthquake of a magnitude 7 or larger is now twice as likely to happen as to not happen.

Interstates 680, 80, 580 and State Route 4 run throughout Contra Costa County. These interstates and state routes divide the County into west, south, north and east. An overpass or undercrossing collapse would significantly alter the response route and time for responding emergency equipment. This is due to limited crossings of the interstate and that in some areas there is only one surface street, which runs parallel to the interstate, which would be congested during a significant emergency.

Earthquakes of this magnitude experienced locally can cause major damage to electrical

transmission facilities and to gas and electrical lines in buildings, which in turn start fires throughout the County. The occurrence of multiple fires will quickly deplete existing fire department resources, thereby reducing and/or delaying their response to any given fire.

A major earthquake could severely restrict the response of all Contra Costa County Fire Districts and their capability to control fires involving buildings of wood frame construction, with ordinary roofing materials and flammable exteriors, or with large interior areas not provided with automatic smoke and fire control systems. Also, when buildings not equipped with earthquake structural support move off their foundations, gas pipes may rupture. Fires develop from line ruptures and spread from house to house, causing an extreme demand for fire protection resources. The proximity of large areas within the County to fault traces necessitates adopting stricter structural construction standards.

WHEREAS, the City's amendments to the CBSC that address soils are necessary as a result of the following local climatic, geological and topographic conditions:

The area is replete with various soils, which are unstable, clay loam and alluvial fans being predominant. These soil conditions are moderately to severely prone to swelling and shrinking, are plastic, and tend to liquefy.

Throughout Contra Costa County, the topography and development growth has created a network of older, narrow roads. These roads vary from gravel to asphalt surface and vary in percent of slope, many exceeding twenty (20) percent. Several of these roads extend up through the winding passageways in the hills providing access to remote, affluent housing subdivisions. The majority of these roads are private with no established maintenance program. During inclement weather, these roads are subject to rock and mudslides, as well as downed trees, obstructing all vehicle traffic. It is anticipated that during an earthquake, several of these roads would be impassable so as to prevent fire protection resources from reaching fires caused by gas line ruptures or other sources.

WHEREAS, the City's amendments to the CBSC that address vegetation, surface features, buildings, landscaping and terrain are necessary as a result of the following local climatic, geological and topographic conditions:

Highly combustible dry grass, weeds, and brush are common in the hilly and open space areas adjacent to built-up locations six (6) to eight (8) months of each year. Many of these areas frequently experience wildland fires, which threaten nearby buildings, particularly those with wood roofs, or sidings. This condition can be found throughout Contra Costa County, especially in those developed and developing areas of the County. Earthquake gas fires due to gas line ruptures can ignite grasslands and stress Fire District resources.

The arrangement and location of natural and manmade surface features, including hills, creeks, canals, freeways, housing tracts, commercial development, fire stations, streets and roads combine to limit feasible response routes for Fire District resources in and to District areas.

Many of the newer large buildings and building complexes have building access and landscaping features and designs, which preclude or greatly limit any approach or operational access to them by Fire District vehicles. In addition, the presence of security gates and roads of inadequate width and grades that are too steep for Fire District vehicles adversely affect fire suppression efforts.

When Fire District vehicles cannot gain access to buildings involved with fire, the potential for complete loss is realized. Difficulty reaching a fire site often requires an increase in fire personnel both in numbers and in stamina. Access problems often result in severely delaying, misdirecting or

making impossible fire and smoke control efforts. In existing structures where pitch roofs have been built over an existing roof, smoke detectors should be required to warn residents of smoke and fire before the arrival of fire personnel.

The above local climatic, geological and topographical conditions increase the magnitude, exposure, accessibility problems, and fire hazards presented to the County fire resources. Fire following an earthquake has the potential of causing greater loss of life and damage than the earthquake itself. Most earthquake fires are created by natural gas developed from gas line ruptures. Hazardous materials, particularly toxic gases, could pose the greatest threat to the largest number, should a significant seismic event occur. Public safety resources would have to be prioritized to mitigate the greatest threat, and may likely be unavailable for smaller single dwellings that were caused by broken gas lines.

Other variables may tend to intensify the situation:

- 1. The extent of damage to the water system
- 2. The extent of isolation due to bridge and/or freeway overpass collapse.
- 3. The extent of roadway damage and/or amount of debris blocking the roadways.
- 4. Climatic condition (hot, dry weather with high winds).
- 5. Time of day will influence the amount of traffic on roadways and could intensify the risk to life during normal business hours.
- 6. The availability of timely mutual aid or military assistance.
- The large portion of dwellings with wood shake or shingle coverings (both on the roof diaphragm and sides of the dwellings) could result in conflagrations.
- 8. The large number of dwellings that slip off their foundations and rupture gas lines and electrical systems resulting in further conflagrations.

WHEREAS, the City's amendments to the CSBC that address precipitation and relative humidity are necessary as a result of the following local climatic, geological and topographic conditions:

Precipitation ranges from 15 to 24 inches per year with an average of approximately 20 inches per year. Ninety-six (96) percent falls during the months of October through April and four (4) percent from May through September. This is a dry period of at least five (5) months each year. Additionally, the area is subject to occasional drought. Relative humidity remains in the middle range most of the time. It ranges from forty-five (45) to sixty-five (65) percent during spring, summer, fall, and from sixty (60) to ninety (90) percent in the winter. It occasionally falls as low as fifteen (15) percent.

Locally experienced dry periods cause extreme dryness of untreated wood shakes and shingles on buildings and non-irrigated grass, brush and weeds, which are often near buildings with wood roofs and sidings. Such dryness causes these materials to ignite very readily and burn rapidly and intensely. Gas fires due to gas line ruptures can also spark and engulf a single family residence during these dry periods.

Because of dryness, a rapidly burning gas fire or exterior building fire can quickly transfer to other buildings by means of radiation or flying brands, sparks or embers. A small fire can rapidly grow to a magnitude beyond the control capabilities of the Fire District resulting in an excessive fire loss.

WHEREAS, the City's amendments to the CSBC that address temperature are necessary as a result of local climactic conditions:

Temperatures in Contra Costa County have been recorded as high as 114º F. Average summer Page 3 of 5

highs are in the 75° - 90° range, with average maximums of 105° F in some areas of unincorporated Contra Costa County.

High temperatures cause rapid fatigue and heat exhaustion of firefighters, thereby reducing their effectiveness and ability to control large building, wildland fires, and fires caused by gas line ruptures. Another impact from high temperatures is that combustible building material and non-irrigated weeds, grass and brush are preheated, thus causing these materials to ignite more readily and burn more rapidly and intensely. Additionally, the resultant higher temperature of the atmosphere surrounding the materials reduces the effectiveness of the water being applied to the burning materials. This requires that more water be applied, which in turn requires more fire resources in order to control a fire on a hot day. High temperatures directly contribute to the rapid growth of fires to an intensity and magnitude beyond the control capabilities of the Fire Districts in Contra Costa County. The change of temperatures throughout the County between very low and extreme highs contributes to a voltage drop in conductors used for power pole lines. This necessitates that voltage drops be considered.

WHEREAS, the City's amendments to the CBSC that address winds are necessary as a result of the following local climactic conditions:

Prevailing winds in many parts of Contra Costa County are from the north or northwest in the afternoons. However, winds are experienced from virtually every direction at one time or another. Velocities can reach fourteen (14) mph to twenty-three (23) mph ranges, gusting to twenty-five (25) to thirty-five (35) mph. Forty (40) mph winds are experienced occasionally and winds up to fifty-five (55) mph have been registered locally. During the winter half of the year, strong, dry, gusty winds from the north move through the area for several days, creating extremely dry conditions.

Winds such as those experienced locally can and do exacerbate fires, both interior and exterior, to burn and spread rapidly. Fires involving non-irrigated weeds, grass, brush, and fires caused by gas line ruptures can grow to a magnitude and be fanned to an intensity beyond the control capabilities of the fire services very quickly even by relatively moderate winds. When such fires are not controlled; they can extend to nearby buildings, particularly those with untreated wood shakes or shingles. Winds of the type experienced locally also reduce the effectiveness of exterior water streams used by all Contra Costa County Fire Districts on fires involving large interior areas of buildings, fires which have vented through windows and roofs due to inadequate built-in fire protection and fires involving wood shake and shingle building exteriors. Local winds will continue to be a definite factor toward causing major fire losses to buildings not provided with fire resistive roof and siding materials and buildings with inadequately separated interior areas, or lacking automatic fire protection systems, proper gas shut-off devices to shut off gas when pipes are ruptured, or proper electrical systems. National statistics frequently cite wind conditions, such as those experienced locally, as a major factor where conflagrations have occurred.

WHEREAS, to address the local climactic, geological and topographical conditions described in this Resolution, Ordinance No. 600 amends the CBSC by, among other things: requiring the installation of a smoke detector in existing flat roof buildings when a pitch roof is added on top of the existing flat roof and the solid seating of the flat roof is not removed; requiring most wood shakes or shingles used for exterior wall covering to be fire treated; increasing the minimum base shear in certain buildings to a level consistent with previous building codes; and requiring masonry foundation walls and concrete foundation walls of residential structures to comply with more restrictive seismic requirements.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LAFAYETTE DOES HEREBY RESOLVE AS FOLLOWS:

<u>Section 1</u>. <u>Adoption of Recitals and Facts Contained in Staff Reports</u>. The Recitals set forth above and all the facts contained in the staff reports of June 11, 2012 and June 25, 2012 are hereby adopted as the Council's official record and incorporated into this Resolution by reference as if restated in full.

Section 2. Modifications to CBSC. To the extent that the changes and modifications to the CBSC made by Ordinance No. 600, adopted by the City Council on June 25, 2012, are deemed more restrictive than the standards contained in the CBSC, pursuant to Health and Safety Code section 17958.7, the City Council hereby finds that those changes and modifications are reasonably necessary to address the local climactic, geological and topographical conditions described in this Resolution.

<u>Section 3</u>. <u>CEQA</u>. The City finds that the adoption of this Resolution is not a "project" within the meaning of the California Environmental Quality Act ("CEQA") because it does not have a potential for resulting in either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment, but rather concerns general policy and procedure making.

The foregoing Resolution was PASSED AND ADOPTED by the City Council of the City of Lafayette at a regular meeting of said Council on June 25, 2012, by the following vote:

AYES: Federighi, M. Anderson, B. Andersson, Anduri and Tatzin

NOES: None ABSENT: None ABSTAIN: None

ATTEST:

APPROVED:

Carol Federighi, Mayor

Attachments:

oanne Robbins, City Clerk

Ord. No. 600